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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,795	12/17/2001	Hiroshi Sakai	Q67694	4397

7590 05/25/2005

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EXAMINER

BARNIE, REXFORD N

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,795

Applicant(s)

SAKAI, HIROSHI

Examiner

REXFORD N. BARNIE

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Rexford Barnie
REXFORD BARNIE
PRIMARY EXAMINER

05/19/05

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/01 and 08/03.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 8, 9 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith et al. (US Pat# 6,052,605) in view of Do (US Pat# 6,321,087) or Jang (US Pat# 6,282,408).

Regarding claims 1 and 8, Meredith et al. teaches a continuous interference assessment and avoidance in a mobile radio system comprising a cell station which provides communication services for a personal station wherein the cell station system provides continuous monitoring of interfering waves or signals and producing interference monitor data and a maintenance terminal which produces an interference profile based on generated data in (see col. 2, col. 6 lines 43-63, col. 7 line 48-col. 9 line 26).

Meredith fails to teach performing monitoring based on a request input.

However, it's well known to perform monitoring based on input signal(s) sent by an operator or maintenance terminal.

Do teaches a monitoring data system in a wireless telecommunication system wherein a base station can monitor a call(s) based on a request from an operator or maintenance terminal in (see col. 2 lines 52-63).

Jang teaches an apparatus and method for measuring air interference of a base station in (see col. 5) by using a maintenance terminal and wherein air interference measurements can be continuously repeated till a stop time has been reached.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Do or Jang into that of Meredith thus making it possible to exactly gather, conveniently store, and analyze air interference in order to take corrective measures, if necessary.

Regarding claim 2, the combination including Meredith teaches monitoring and gathering interference data via antenna(s).

Regarding claim 5, the combination including Meredith teaches display of interference profile or data in (see col. 9).

Regarding claims 9 and 15, see the explanation as set forth in the rejection of claim 1 because the claimed apparatus would perform the method steps. Furthermore, according to the combination including Meredith, the source of interference can be deciphered to know what channels and/or antennas in (see cols. 9-10).

Regarding claims 16-17, The combination teaches request monitoring via a maintenance terminal and the communication to be monitored being connected by a base station coupled to a telephone, thus two independent actions.

Claims 3, 4, 10, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith et al. (US Pat# 6,052,605) in view of Do (US Pat# 6,321,087) or Jang (US Pat# 6,282,408) and further in view of Shimura (US pat# 4,837,801).

Regarding claims 3 and 11, Meredith teaches monitoring of signal strength in (see col. 8 lines 55-65) but fails to teach the claimed subject matter in detail as taught by Shimura who teaches a base station capable of monitoring of interference on every transmission in (see abstract and col. 10 lines 3-22) and measuring signal strength. Furthermore, Shimura teaches a time division multiplexing system in (see col. 4 lines 67-68).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shimura into that of Meredith thus making it possible to take detect interference and take corrective measures when necessary to avoid loss of revenue.

Regarding claims 4 and 12, the examiner takes official notice that it's well known to control switching elements remotely from a user terminal to perform monitoring or testing after which it can be changed to a normal communication servicing mode. Furthermore, OAM or OAM&P systems are known to provide provisioning, operations, administrations/authorization and maintenance remotely to network elements based on transmitted signals. The combination as set forth in claim 1 provides references to support the official notice

Regarding claim 10, The subject matter is rendered obvious by the combination, which teaches being able to use antenna (s) to monitor interference data and would be based on complexity of network.

Claims 6-7, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith et al. (US Pat# 6,052,605) in view of Do (US Pat#

6,321,087) or Jang (US Pat# 6,282,408) and further in view of Iwata (US Pat# 5,845,209)

Regarding claims 6-7, 13 and 14, Meredith fails to teach the claimed subject matter but Iwata teaches a mobile communication system wherein interference can be monitored in a communication system where TDM and TDMA techniques can be used in (see col. 1 lines 5-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Iwata into that of Meredith thus making it possible to monitor interference in any communication system commercially available including TDMA system known for its capability of accommodating a plurality of users efficiently.

Regarding claim 10, The subject matter is rendered obvious by the combination, which teaches being able to use antenna (s) to monitor interference data and would be based on complexity of network

Claims 6-7, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith et al. (US Pat# 6,052,605) in view of Do (US Pat# 6,321,087) or Jang (US Pat# 6,282,408) and further in view of Sakamoto et al. (US Pat# 5,408,514)

Regarding claims 6-7, 13 and 14, Meredith fails to teach the claimed subject matter but Sakamoto et al. teaches a method of handover and route diversity in mobile radio communication in (see col. 10) wherein monitoring of signal levels can be performed using timeslots.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Iwata into that of Meredith thus making it possible to monitor interference in any communication system commercially available including TDMA system known for its capability of accommodating a plurality of users efficiently.

Regarding claim 10, The subject matter is rendered obvious by the combination, which teaches being able to use antenna (s) to monitor interference data and would be based on complexity of network.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith et al. (US Pat# 6,052,605) in view of Do (US Pat# 6,321,087) or Jang (US Pat# 6,282,408) and further in view of Taylor et al. (US Pat# 5,095,500).

Regarding claim 18, The combination teaches being able to gather and analyze interference information and generating a hard copy as a possibility in (see cols. 9-10 of Meredith) but implicitly fails to teach that the information would be based on at one variable even though, the antenna, channel and so forth such as illustrated in (fig. 5 and col. 9) in conjunction with possible interference occurrence could read on the limitation.

For the sake of argument, Tayloe et al. teaches a cellular telephone diagnostic system in (see figs., cols. 5-7) wherein variable or factors including BER, signal strength, traffic density and so forth can be measured and graphically presented to a maintenance terminal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Tayloe into that of the

combination thus making it possible to diagnose network problems, pinpoint exact problem areas and take corrective measures, if necessary for analyzed problems causes.

Regarding claim 19, The combination teaches an antenna with monitoring elements in (see fig. 1 of Tayloe).

Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **REXFORD N BARNIE** whose telephone number is 571-272-7492. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/015,795

Page 8

Art Unit: 2643

PRIMARY EXAMINER
REXFORD BARNIE
05/20/05

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